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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,908	04/20/2004	Shun-Min Chen	SII019	5660

25271 7590 11/22/2005

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EXAMINER

RODRIGUEZ, RUTH C

ART UNIT PAPER NUMBER

3677

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/828,908	Applicant(s) CHEN, SHUN-MIN	
	Examiner Ruth C. Rodriguez	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 5 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/20/04 & 5/09/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statements filed on 20 April 2004 and 09 May have been considered for this Office Action.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 12 (Fig. 1), 66 (Fig.,8) and 430 (Fig. 5).

4. The drawings are objected to because reference character "631" in the lower left side does not have a leading line in Figure 7 and reference character "63" (second occurrence at the right) in the left side of Figure 7 should be replaced with --632--.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities: Page 8, line 18, "411" should be replaced with --402--. Correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 4 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang (US 5,781,944).

A coupling device (30) for a foldable frame that includes a pair of elongate rod members (40) (Figs. 1-9). Each of the rod members has an engaging end portion and a pivot portion connected to the engaging end portion (Figs. 2-4). The coupling device interconnects pivotally the pivot portions of the rod members such that the rod members are operable so as to move from an extended position where the rod members are aligned with each other in a first direction (Fig. 3) to a folded position where the rod members are generally parallel to each other and extend in a second direction generally transverse to the first direction (Fig. 4). The coupling device comprises a coupling seat unit (31), a spring-loaded latch unit (33) and an actuating unit (34). The coupling seat unit is configured with an accommodating space and has a first open side and a second side opposite to each other in the second direction, and third and fourth open sides opposite to each other in the first direction (Figs. 2-4). The third and fourth open sides are adapted to be connected pivotally and respectively to the pivot portions of the rod members such that the engaging end portion of each of the rod members extends into

the accommodating space in the first direction via a respective one of the third and fourth open sides when the rod members are in the extended position and such that the engaging end portion of each of the rod members is disposed at the respective one of the third and fourth open sides (Figs. 2-4). The spring-loaded latch unit is mounted movably in the accommodating space of the coupling seat unit (Figs. 2-4). The latch unit is operable from an engaging position where the latch unit is adapted to engage the engaging end portions of the rod members so as to retain the rod members in the extended position (Fig. 3) to a releasing position where the latch unit is unable to engage the engaging end portions of the rod members so as to permit movement of the rod members from the extended position to the folded position (Fig. 4). The actuating member has a connecting portion (341) and an actuating portion (bottom of 34). The connecting portion extends into the accommodating space of the coupling seat unit via the first open side and that is mounted movably on the coupling seat unit so as to be movable relative to the coupling seat unit in the second direction (Fig. 2-4). The actuating portion is connected to the connecting portion and is disposed at the first open side of the coupling seat unit and operable externally of the accommodating space for moving the actuating portion in the accommodating space along the second direction such that the actuating portion drives the latch unit to move from the engaging position to the releasing position (Figs. 2-4).

The connecting portion of the actuating member is formed with a guiding groove (341) extending in the second direction and the coupling seat unit is formed with at least

a guiding projection (Figs. 3 and 4) that extends into the guiding groove to guide movement of the actuating member in the second direction (Figs. 2-4).

A coupling device (30) for a foldable frame includes a pair of elongate rod members (40) and a coupling device (30) (Figs. 1-9). Each of the rod members has an engaging end portion and a pivot portion connected to the engaging end portion (Figs. 2-4). The coupling device interconnects pivotally the pivot portions of the rod members such that the rod members are operable so as to move from an extended position where the rod members are aligned with each other in a first direction (Fig. 3) to a folded position where the rod members are generally parallel to each other and extend in a second direction generally transverse to the first direction (Fig. 4). The coupling device comprises a coupling seat unit (31), a spring-loaded unit (33) and an actuating member (34). The coupling seat unit is configured with an accommodating space and is adapted be connected pivotally and respectively to the pivot portions of the rod members such that the engaging end portion of each of the rod members extends into the accommodating space in the first direction when the rod members are in the extended position (Fig. 3). The spring-loaded latch unit is mounted movably in the accommodating space of the coupling seat unit (Figs. 2-4). The latch unit is operable from an engaging position where the latch unit is adapted to engage the engaging end portions of the rod members so as to retain the rod members in the extended position (Fig. 3) to a releasing position where the latch unit is unable to engage the engaging end portions of the rod members so as to permit movement of the rod members from the extended position to the folded position (Fig. 4). The actuating member has a

connecting portion (341) and an actuating portion (the bottom of 34). The connecting portion extends into the accommodating space of the coupling seat unit so as to be movable relative to the coupling seat unit in the second direction (Figs. 2-4). The actuating portion is connected to the connecting portion, is disposed at the coupling seat unit and is operable externally of the accommodating space for moving the actuating portion in the accommodating space along the second direction such that the actuating portion drives the latch unit to move from the engaging position to the releasing position (Figs. 2-4).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Shogan et al. (US 5,745,954).

Huang discloses a coupling device having all the features listed above for the rejection of claim 1. Huang fails to disclose that the actuating portion of the actuating member has an undulated operating surface remote from the connecting portion in the second direction. However, Shogan teaches a coupling device (100) comprising a pair

of elongate rod members (22), a coupling seat unit (40), a spring-loaded latch unit (62) and an actuating member (63). The rod members are pivotally attached to the coupling seat (Figs. 3-5). The spring-loaded latch unit secures the rod members in an extended position where they are aligned to each other by engaging the ends of the rod members in a first direction (Fig. 4). Engaging blocks that are pivotally connected to the coupling seat unit and to the ends of the rod member and are actuated by the actuating member (Figs. 3-5). The actuating portion of the actuating member has an undulated operating surface remote from a connecting portion in a second direction perpendicular to the first direction (Figs. 3-5). The undulations are provided to receive the user fingers (C. 5, L. 17-18). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the actuating portion of the actuating member with an undulated operating surface remote from the connecting portion in the second direction as taught by Shogan in the device of Huang. Doing so, provides undulation that can receive the users fingers.

Allowable Subject Matter

10. Claims 2, 3, 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Huang (US 5,781,944) is cited to show state of the art with respect to a coupling device having most of the features being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase the patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as PTO's mailroom processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MPEP § 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP § 512). The following is an example of the format the certification might take:

(Typed or printed name of person signing this certificate)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP § 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response has been transmitted by facsimile will cause further unnecessary delays in the processing of your application, duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

RCR
rcr

November 13, 2005

Robert J. Sandy
ROBERT J. SANDY
PRIMARY EXAMINER